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DISPENSING ASSEMBLY WITH INTERCHANGEABLE
CARTRIDGE PUMPS

ABSTRACT OF THE DISCLOSURE

- This invention describes a cartridge pump and dispensing assembly for
- 5 applications where cartridges containing liquid reagents are interchanged often. The
cartridge pump ^{has} comprises a reagent reservoir which directly empties into a metering
chamber. A valve is at each end of the metering chamber. The two valves are aligned
in the same direction so as to allow unidirectional liquid flow. The metering chamber
is made of a compressible material, such as flexible tubing, so that when an external
- 10 compression is applied to the chamber, the liquid contained therein is forcibly expelled.
As the compression is removed, the metering chamber resumes its former shape and
draws liquid into the chamber from the reagent reservoir. A dispensing assembly with
electromechanical actuators for compression of the metering chamber and a ^{Sensor} means for
sensing the amount of liquid contained within the reagent reservoir
- 15 are also shown.

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